(a) conveying the first glass sheet [(24)], leaning against the first supporting device [(1, 31)], on a first track [(20)] of the horizontal conveyor into a predefined first position in which it is stopped;

(b) transferring the first glass sheet [(24)] in a direction transverse to the conveying direction of the horizontal conveyor into a position opposite the first position, in which it stands on the horizontal conveyor in upright position, leaning against the second supporting device [(2, 32)] inclined in a direction opposite to the direction of the first supporting device [(1, 31)];

(c) conveying the second glass sheet [(25)], leaning against the first supporting device [(1, 31)] into the first position;

(d) synchronously conveying the first and the second glass sheets [(24, 25)], leaning against their respective supporting devices [(1, 2, 31, 32)] into a predefined second position on a second track [(30)] of the horizontal conveyor that can be driven separately from the first track [(20)] of the horizontal conveyor;

(e) repeating the steps (a) to (d) at least once for glass sheets intended for assembly of at least one further insulating glass pane;

(f) conveying the glass sheet pairs [(24, 25)], standing upright on the second track [(30)] of the horizontal conveyor, into the opened assembly and pressing device, which latter comprises a third track [(40)] of the horizontal conveyor that can be driven separately from the second track [(30)] of the horizontal conveyor;

(g) stopping the glass sheet pairs [(24, 25)] in the assembly and pressing device.

2. (amended) The method as defined in Claim 1, [characterized in that] <u>wherein</u> the two glass sheets [(24, 25)] intended for one insulating glass pane are conveyed on at least one of the tracks [(20, 30, 40)] of the horizontal conveyor, which latter is are provided with conveyor elements [(20a, 40a)], in upright position standing on the same conveyor element [(40a)] and inclined in opposite directions.

3. (amended) The method as defined in Claim 1 [or Claim 2], [characterized in that] <u>wherein</u> the two glass sheets [(24, 25)] intended for one insulating glass pane are conveyed on at least one of the tracks [(20, 30, 40)] of the horizontal conveyor, on

conveyor elements arranged in pairs one beside the other and inclined in opposite directions, by driving such elements in synchronism.

4. (amended) The method as defined in Claim 2 [or Claim 3], [characterized in that] wherein at least the conveyor elements [(40a)] of the third track [(40)] of the horizontal conveyor are belts, especially toothed belts.

5. (amended) The method as defined in claim 1 [any of the preceding claims], [characterized in that] wherein the second position is selected in such a way that the rear edge of the respective first [(24)] and second glass sheets [(25)] comes to lie in that position adjacent the forward end of the first track [(20)] of the horizontal conveyor.

6. (amended) The method as defined in claim 1 [any of the preceding claims[, [characterized in that] wherein the pairs of first and second glass sheets [(24, 25)] are positioned in the second track [(30)] of the horizontal conveyor in close succession.

7. (amended) The method as defined in [any of[Claim[s[1 [to 6], [characterized in that] wherein the third track [(40)] of the horizontal conveyor can be selectively driven and stopped separately from the first track [(20)] of the horizontal conveyor [or in synchronism with the latter].

8. (amended) Device for positioning glass sheets [(24, 25)], that are arranged in pairs one opposite the other, in a vertical assembly and pressing device for insulating glass panes

which is intended for being integrated in a production line for insulating glass panes,

in which a first glass sheet [(24)] and a second glass sheet [(25)] carrying a spacer [(27)], intended for an insulating glass pane, are fed into the assembly and pressing device in upright position, standing on a horizontal conveyor, which is subdivided into several tracks [(20, 30, 40)], and leaning against a first supporting device [(1, 31)], in which a third track [(40)] of the horizontal conveyor is provided, the assembly and pressing device comprising an arrangement consisting of two pressure plates [(1a, 2a)], arranged above the horizontal conveyor, that can be transferred from a first position, in which they are inclined in opposite directions, to a second position in which they are positioned one in parallel to the other,

having a second track [(30)] of the horizontal conveyor arranged upstream of the assembly and pressing device, which can be driven and stopped separately from the third track [(40)] of the horizontal conveyor or in synchronism with the latter;

having two supporting devices [(31, 32)] arranged above the second track [(30)] of the horizontal conveyor, which are inclined in opposite directions in such a way that they are aligned with the pressure plates [(1a, 2a)] when the latter occupy their first position;

[characterized in that] wherein a first track [(20)] of the horizontal conveyor, arranged upstream of the second track [(30)] of the horizontal conveyor, can be driven and stopped separately from the second track [(30)] of the horizontal conveyor or in synchronism with the latter;

that a first and a second supporting device [(1, 2)] arranged above the first track [(20)] of the horizontal conveyor, are inclined in opposite directions in such a way that they are aligned with the pressure plates [(1a, 2a)] when the latter occupy their first position (initial position of the movable pressure plate [(2a)]); and

that means for transferring the respective first glass sheet [(24)] from the first supporting device [(1)] to the second supporting device [(2)] in its oppositely inclined position, relative to the first supporting device [(1)], are provided in the area of the first track [(20)] of the horizontal conveyor.

9. (amended) The device as defined in Claim 8, [characterized in that] wherein the third track [(40)] of the horizontal conveyor can be driven and stopped separately from the first track [(20)] of the horizontal conveyor and also in synchronism with the latter.

10. (amended) The device as defined in Claim 8 [or Claim 9], [characterized in that] wherein at least one of the tracks [(20, 30, 40)] of the horizontal conveyor comprises conveyor elements [(20a, 40a)] designed in such a way that they are capable of simultaneously supporting both glass sheets [(24, 25)] intended for one insulating glass pane, in oppositely inclined positions one relative to the other.

11. (amended) The device as defined in [any of] Claim[s] 8 [to 10], [characterized in that] wherein at least one of the tracks [(20, 30, 40)] of the horizontal conveyor

comprises conveyor elements arranged in pairs one beside the other, that can be driven in synchronism by common drive members.

12. (amended) The device as defined in Claim 10 [or Claim 11], [characterized in that] wherein at least the conveyor elements [(40a)] of the third track [(40)] of the horizontal conveyor are belts, especially toothed belts.

13. (amended) The device as defined in claim 8 [any of the preceding claims], [characterized in that] wherein a position sensor responsive of the glass sheets [(24, 25)], which is capable of stopping the drive of the second track [(30)] of the horizontal conveyor, is associated to the rear end of the second track [(30)] of the horizontal conveyor.

14. (amended) The device as defined in [any of] Claim[s] 8 [to 13], [characterized in that] wherein the second track [(30)] of the horizontal conveyor has at least the same length [, preferably the same length,] as the pressure plates [(1a, 2a)].

15. (amended) The device as defined in [any of] Claim[s] 8 [to 14], [characterized in that] wherein the first track [(20)] of the horizontal conveyor is shorter than the pressure plates [(1a, 2a)].

16. (amended) The device as defined in Claim 15, [characterized in that] wherein the first track [(20)] of the horizontal conveyor has a length of not more than half the length of the pressure plates [(1a, 2a)].

17. (amended) The device as defined in [any of] Claim[s] 8 [to 16], [characterized in that] wherein the second supporting device [(2)], provided above the first track [(20)] of the horizontal conveyor, comprises a plate [(2a)] with openings or holes [(4)] through which air can be selectively drawn in or blown out using a blower, and that the plate [(2a)] can be approached to, and aligned in parallel with, the first supporting device [(1)] arranged opposite to it.

18. (amended) The device as defined in Claim 17, [characterized in that] wherein the first supporting device [(1)] is immovable.

19. (amended) The device as defined in Claim 17 [or Claim 18], [characterized in that] wherein the plate [(2a)], for being approached to the opposite first supporting device [(1)], can be pivoted from its initial position, in which it is aligned with the

second pressure plate, about an axis [(10)] parallel to the conveying direction of the horizontal conveyor into an intermediate position parallel to the first supporting device [(1)], and can be displaced in parallel to itself, perpendicularly to the conveying direction.

20. (amended) The device as defined in Claim 19, [characterized in that] wherein that pivot axis [(10)] extends below a transporting surface of the horizontal conveyor.

21. (amended) The device as defined in Claim 19 [or Claim 20], [characterized in that] wherein the plate [(2a)] can be stopped in its intermediate position.

22. (amended) The device as defined in [any of] Claim[s] 8 [to 20], [characterized in that] wherein the horizontal conveyor has coinciding upper tangential planes [(35, 36)] in its first, second and third tracks [(20, 30, 40)], the tangential planes enclosing with the sides of the pressure plates [(1a, 1b)] which face each other in their oppositely inclined positions, angles that are greater than 90° [and, preferably, equal one to the other].

23. (amended) The device as defined in Claim 22, [characterized in that] wherein the upper tangential planes [(35, 36)] are horizontal.

24. (amended) The device as defined in [any of] Claim[s] 19 [to 23], [characterized in that] wherein the second pressure plate [(2a)] can be moved in the same way in which the second plate [(2a)] is moved in the area of the track [(20)] of the horizontal conveyor.

25. (amended) The device as defined in [any of] Claim[s] 8 [to 24], [characterized in that] wherein the first pressure plate [(1a)] is immovable.

26. (amended) The device as defined in Claim[s] 24 [and 25], [characterized in that] wherein the second pressure plate [(2a)] is positioned in parallel relative to the first pressure plate [(1a)] at a spacing of at least 45 mm[, preferably 50 to 60 mm,] and can be further approached to the first pressure plate by linear parallel displacement.

27. (amended) The device as defined [in any] of Claim[s] 19 [to 26], [characterized in that] wherein the position of the pivot axis [(10)] is selected to ensure that the lower edge of a first glass sheet [(24)], that has been attached to the movable plate [(2a)] by suction, having been picked up from the opposite first supporting device

[(1)], has a small distance from the transporting surface of the horizontal conveyor [of, preferably, not more than 2 mm] when the movable plate [(2a)] has reached its initial position, aligned with the second pressure plate [(2a)] in its initial position, in which it is inclined in a direction opposite to the first supporting device [(1)].

28. (amended) The device as defined in [any of] Claim [s 13 to 27] 8, [in combination with Claims 10 and 12, characterized in that] wherein the belt [(20a)] has a width of at least 100 mm[, especially 100 mm to 120 mm].

29. (amended) The device as defined in any of Claims 13 to 28, [in combination with Claims 10 and 12, characterized in that] wherein the belt [(40a)] in the assembly and pressing device has a width of at least 120 mm, especially 120 mm to 140 mm.

30. (new) The method as defined in claim 3, [characterized in that] wherein at least the conveyor elements of the third track of the horizontal conveyor are belts, especially toothed belts.

31. (new) The method as defined in claim 1, [characterized in that] wherein the third track of the horizontal conveyor can be selectively driven and stopped in synchronism with the horizontal conveyor.

32. (new) The device as defined in claim 11, [characterized in that] wherein at least the conveyor elements of the third track of the horizontal conveyor are belts, especially toothed belts.

33. (new) The device as defined in claim 22, [characterized in that] wherein the angles, which the tangential planes enclose with the sides of the pressure plates, equal one to the other.

34. (new) The device as defined in claim 26, [characterized in that] wherein the spacing between the first and second pressure plates is 50 to 60 mm.

35. (new) The device as defined in claim 27, [characterized in that] wherein the lower edge of the first glass sheet has a distance of not more than 2 mm from the transporting surface of the horizontal conveyor.

36. (new) The device as defined in claim 28, [characterized in that] wherein the belt has a width of 100 mm to 120 mm.

37. (new) The device as defined in Claim 10, [characterized in that] wherein the belt has a width of at least 100 mm.

38. (new) The device as defined in Claim 12, [characterized in that] wherein the belt has a width of at least 100 mm.

39. (new) The device as defined in Claim 10, [characterized in that] wherein the belt in the assembly and pressing device has a width of at least 120 mm, especially 120 mm to 140 mm.

40. (new) The device as defined in Claim 12, [characterized in that] wherein the belt in the assembly and pressing device has a width of at least 120 mm, especially 120 mm to 140 mm.

Claims as amended:

1. Method for positioning glass sheets, that are arranged in pairs one opposite the other, in a vertical assembly and pressing device for insulating glass panes which is part of a production line for insulating glass panes, in which a first glass sheet and a second glass sheet carrying a spacer, intended for an insulating glass pane, are fed into the assembly and pressing device in upright position, standing on a horizontal conveyor and leaning against a first supporting device, the assembly and pressing device comprising an arrangement consisting of two pressure plates that can be transferred from a first position, in which they are inclined in opposite directions, to a second position in which they are positioned one in parallel to the other, by

(a) conveying the first glass sheet, leaning against the first supporting device, on a first track of the horizontal conveyor into a predefined first position in which it is stopped;

(b) transferring the first glass sheet in a direction transverse to the conveying direction of the horizontal conveyor into a position opposite the first position, in which it stands on the horizontal conveyor in upright position, leaning against the second supporting device inclined in a direction opposite to the direction of the first supporting device;

(c) conveying the second glass sheet, leaning against the first supporting device into the first position;

(d) synchronously conveying the first and the second glass sheets, leaning against their respective supporting devices into a predefined second position on a second track of the horizontal conveyor that can be driven separately from the first track of the horizontal conveyor;

(e) repeating the steps (a) to (d) at least once for glass sheets intended for assembly of at least one further insulating glass pane;

(f) conveying the glass sheet pairs, standing upright on the second track of the horizontal conveyor, into the opened assembly and pressing device, which latter comprises a third track of the horizontal conveyor that can be driven separately from the second track of the horizontal conveyor;

(g) stopping the glass sheet pairs in the assembly and pressing device.

2. The method as defined in Claim 1, wherein the two glass sheets intended for one insulating glass pane are conveyed on at least one of the tracks of the horizontal conveyor, which latter is are provided with conveyor elements, in upright position standing on the same conveyor element and inclined in opposite directions.

3. The method as defined in Claim 1, wherein the two glass sheets intended for one insulating glass pane are conveyed on at least one of the tracks of the horizontal conveyor, on conveyor elements arranged in pairs one beside the other and inclined in opposite directions, by driving such elements in synchronism.

4. The method as defined in Claim 2, wherein at least the conveyor elements of the third track of the horizontal conveyor are belts, especially toothed belts.

5. The method as defined in Claim 1, wherein the second position is selected in such a way that the rear edge of the respective first and second glass sheets comes to lie in that position adjacent the forward end of the first track of the horizontal conveyor.

6. The method as defined in Claim 1, wherein the pairs of first and second glass sheets are positioned in the second track of the horizontal conveyor in close succession.

7. The method as defined in Claim 1, wherein the third track of the horizontal conveyor can be selectively driven and stopped separately from the first track of the horizontal conveyor.

8. Device for positioning glass sheets, that are arranged in pairs one opposite the other, in a vertical assembly and pressing device for insulating glass panes

which is intended for being integrated in a production line for insulating glass panes,

in which a first glass sheet and a second glass sheet carrying a spacer, intended for an insulating glass pane, are fed into the assembly and pressing device in upright position, standing on a horizontal conveyor, which is subdivided into several tracks, and leaning against a first supporting device, in which a third track of the horizontal conveyor is provided, the assembly and pressing device comprising an arrangement consisting of two pressure plates , arranged above the horizontal conveyor, that can be transferred from a first position, in which they are inclined in opposite directions, to a second position in which they are positioned one in parallel to the other,

having a second track of the horizontal conveyor arranged upstream of the assembly and pressing device, which can be driven and stopped separately from the third track of the horizontal conveyor or in synchronism with the latter;

having two supporting devices arranged above the second track of the horizontal conveyor, which are inclined in opposite directions in such a way that they are aligned with the pressure plates when the latter occupy their first position;

wherein a first track of the horizontal conveyor, arranged upstream of the second track of the horizontal conveyor, can be driven and stopped separately from the second track of the horizontal conveyor or in synchronism with the latter;

that a first and a second supporting device arranged above the first track of the horizontal conveyor, are inclined in opposite directions in such a way that they are aligned with the pressure plates when the latter occupy their first position (initial position of the movable pressure plate); and

that means for transferring the respective first glass sheet from the first supporting device to the second supporting device in its oppositely inclined position, relative to

the first supporting device, are provided in the area of the first track of the horizontal conveyor.

9. The device as defined in Claim 8, wherein the third track of the horizontal conveyor can be driven and stopped separately from the first track of the horizontal conveyor and also in synchronism with the latter.

10. The device as defined in Claim 8, wherein at least one of the tracks of the horizontal conveyor comprises conveyor elements designed in such a way that they are capable of simultaneously supporting both glass sheets intended for one insulating glass pane, in oppositely inclined positions one relative to the other.

11. The device as defined in Claim 8, wherein at least one of the tracks of the horizontal conveyor comprises conveyor elements arranged in pairs one beside the other, that can be driven in synchronism by common drive members.

12. The device as defined in Claim 10, wherein at least the conveyor elements of the third track of the horizontal conveyor are belts, especially toothed belts.

13. The device as defined in Claim 8, wherein a position sensor responsive of the glass sheets, which is capable of stopping the drive of the second track of the horizontal conveyor, is associated to the rear end of the second track of the horizontal conveyor.

14. The device as defined in Claim 8, wherein the second track of the horizontal conveyor has at least the same length as the pressure plates.

15. The device as defined in Claim 8, wherein the first track of the horizontal conveyor is shorter than the pressure plates.

16. The device as defined in Claim 15, wherein the first track of the horizontal conveyor has a length of not more than half the length of the pressure plates.

17. The device as defined in Claim 8, wherein the second supporting device, provided above the first track of the horizontal conveyor, comprises a plate with openings or holes through which air can be selectively drawn in or blown out using a blower, and that the plate can be approached to, and aligned in parallel with, the first supporting device arranged opposite to it.

18. The device as defined in Claim 17, wherein the first supporting device is immovable.

19. The device as defined in Claim 17, wherein the plate, for being approached to the opposite first supporting device, can be pivoted from its initial position, in which it is aligned with the second pressure plate, about an axis parallel to the conveying direction of the horizontal conveyor into an intermediate position parallel to the first supporting device, and can be displaced in parallel to itself, perpendicularly to the conveying direction.

20. The device as defined in Claim 19, wherein that pivot axis extends below a transporting surface of the horizontal conveyor.

21. The device as defined in Claim 19, wherein the plate can be stopped in its intermediate position.

22. The device as defined in Claim 8, wherein the horizontal conveyor has coinciding upper tangential planes in its first, second and third tracks, the tangential planes enclosing with the sides of the pressure plates which face each other in their oppositely inclined positions, angles that are greater than 90°.

23. The device as defined in Claim 22, wherein the upper tangential planes are horizontal.

24. The device as defined in Claim 19, wherein the second pressure plate can be moved in the same way in which the second plate is moved in the area of the track of the horizontal conveyor.

25. The device as defined in Claim 8, wherein the first pressure plate is immovable.

26. The device as defined in Claim 24, wherein the second pressure plate is positioned in parallel relative to the first pressure plate at a spacing of at least 45 mm and can be further approached to the first pressure plate by linear parallel displacement.

27. The device as defined of Claim 19, wherein the position of the pivot axis is selected to ensure that the lower edge of a first glass sheet, that has been attached to the movable plate by suction, having been picked up from the opposite first supporting device, has a small distance from the transporting surface of the horizontal conveyor

when the movable plate has reached its initial position, aligned with the second pressure plate in its initial position, in which it is inclined in a direction opposite to the first supporting device.

28. The device as defined in Claim 8, in combination with Claims 10 and 12, wherein the belt has a width of at least 100 mm.

29. The device as defined in any of Claims 13 to 28, in combination with Claims 10 and 12, wherein the belt in the assembly and pressing device has a width of at least 120 mm, especially 120 mm to 140 mm.

Please add the following new claims:

30. The method as defined in Claim 3, wherein at least the conveyor elements of the third track of the horizontal conveyor are belts, especially toothed belts.

31. The method as defined in Claim 1, wherein the third track of the horizontal conveyor can be selectively driven and stopped in synchronism with the horizontal conveyor.

32. The device as defined in Claim 11, wherein at least the conveyor elements of the third track of the horizontal conveyor are belts, especially toothed belts.

33. The device as defined in Claim 22, wherein the angles, which the tangential planes enclose with the sides of the pressure plates, equal one to the other.

34. The device as defined in Claim 26, wherein the spacing between the first and second pressure plates is 50 to 60 mm.

35. The device as defined in Claim 27, wherein the lower edge of the first glass sheet has a distance of not more than 2 mm from the transporting surface of the horizontal conveyor.

36. The device as defined in Claim 28, wherein the belt has a width of 100 mm to 120 mm.

37. The device as defined in Claim 10, wherein the belt has a width of at least 100 mm.

38. The device as defined in Claim 12, wherein the belt has a width of at least 100 mm.